

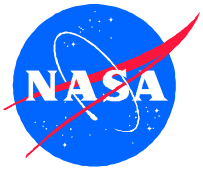
ULDB  
PDR

3.3  
Telemetry

## *HWCI 3.3.5.1*

### *UHF Command Receiver*

- Requirements Traceability
  - DTRD Section 3.3.4
- Functional and Performance Requirements
  - 3.3.5.1.a: Command data baud rate 300 bps
  - 3.3.5.1.b: Sensitivity (20db quieting) 0.5 microvolt
  - 3.3.5.1.c: Powered by 8.5-16 VDC / <100 ma unsquelched
  - 3.3.5.1.d: Operates at -30C to +60C/ Unlimited Altitude
- HWCI Description
  - Use EF Johnson DL-3410 / Johnson Data Telemetry UHF JSLM (429.5) With FSK modem
  - Attached internal to CDM pressure vessel
  - Weight: < 1 lb.



ULDB  
PDR

3.3  
Telemetry

David Gregory  
PSL  
November 4-5, 1998

## *HWC1 3.3.5.1*

### *UHF Command Receiver*

- Risk Assessment & Mitigation/Reliability
  - EF Johnson DL-3410 Previously flown on conventional and LDB balloon flights
  - Proven reliability
  - JDT JSLM Not previously flown but nearly identical specifications - sensitivity and drift specifications better than that for DL-3410
  - JSLM Risks mitigated by flying in CDM pressure vessel
- Verification Matrix

Req. #	Requirement	Verification Method
3.3.5.1.a	Command data rate of 300 bps	Demonstration
3.3.5.1.b	Sensitivity (20 db quieting) 0.5 microvolt	Demonstration
3.3.5.1.b	Operate to Edge of LOS TM Range	Test Flight
3.3.5.1.c	Powered by 8.5 - 16 VDC	Demonstration
3.3.5.1.c	<100 ma unsquelched	Demonstration
3.3.5.1.d	Operates at -30C to +60C	Thermal / VAC Testing
		Test Flight
3.3.5.1.d	Operates at Unlimited Altitude	Thermal / VAC Testing
		Test Flight